

-2-

On page 1, at line 10, please insert the following new subheading:

A2

DESCRIPTION OF THE PRIOR ART

On page 3, at line 33, please insert the following new heading:

A3

SUMMARY OF THE INVENTION

On page 4, at line 8, please insert the following new heading and paragraph:

A4

BRIEF DESCRIPTION OF THE DRAWINGS

The single figure is a graph showing viscosity versus time (days) of an acetone dispersion.

On page 4, at line 8, please insert the following new heading:

A5

DESCRIPTION OF THE PREFERRED EMBODIMENTS

In the Claims

Please cancel claims 1-¹⁵~~17~~.

Please add the following new claims, ¹⁵⁻³⁸18-38:

A6

NEWLY ADDED CLAIMS

16. ~~18~~. (New) A process for preparing modified metal oxides or metal aquoxides that are dispersible in organic solvents comprising:

- (I) reacting
- (A) at least metal oxide or metal aquoxide having a crystallite size of 4 to 100 nm, determined by x-ray diffraction on the 021 reflex, and a particle size of 5 to 500 nm, determined by photon correlation spectroscopy in dispersion.

516/100
34
252/303.5
501/309

-3-

with

- (B) at least one organic sulfonic acid wherein
- (i) in case the reaction takes place in a mainly aqueous medium or in the absence of a diluent/solvent, the organic sulfonic acid is a mono-, di-, or trialkylbenzene sulfonic acid, wherein the alkyl residue(s) are C₁ to C₆ alkyl residue(s) and wherein the component (A), calculated as metal oxide, and (B) are used at weight ratios from 98:2 to 70:30, or
 - (ii) in case the reaction takes place in the presence of an organic aprotic solvent or an organic protic solvent, the organic sulfonic acid comprises at least 14 carbon atoms and at least one aromatic ring, and wherein the components (A), calculated as metal oxide, and (B) are used at weight ratios from 98:2 to 70:30, and
- (II) drying the modified metal oxide or metal aquaoxide.

17.
~~19.~~

(New) The process according to claim 18, characterized in that said metal oxide or metal aquoxide contains aluminum.

18.
~~20.~~

(New) The process according to claim 19 wherein said metal oxide or metal aquoxide are selected from the group consisting of aluminas, alumina hydrates, aluminum silicate, Si/Al mixed oxides and mixtures thereof.

19

21. (New) The process according to claim 20 wherein said alumina hydrates are selected from the group consisting of boehmite, pseudoboehmite and mixtures thereof.

20

22. (New) The process according to any one of claims 18-21, characterized in that the organic sulfonic acid is a toluenesulfonic acid.

21

23. (New) The process according to claim 22 wherein said toluenesulfonic acid is p-toluenesulfonic acid.

22

24. (New) The process according to any one of claims 18-21, characterized in that the organic sulfonic acid has the formula $R-SO_3H$, wherein R is an alkyl-substituted aromatic hydrocarbon residue with 16 to 24 carbon atoms.

178

23

25. (New) The process according to any one of claims 18-21, characterized in that the metal oxides or metal aquoxides and the organic sulfonic acid are brought into contact at temperatures from 0 to 140°C.

24

26. (New) The process according to claim 25 wherein the temperature is from 0° to less than 90°C.

25

27. (New) The process according to any one of claims 18-21, characterized in that the metal oxides or metal aquoxides are brought into contact with the organic sulfonic acid for a period of time of from 30 seconds to 7 days.

-5-

~~26~~
28.

(New) The process according to claim 27 wherein the period of time is from 30 to 90 minutes.

~~28~~
29.

(New) The process of claim 27 conducted with stirring.

~~28~~
30.

(New) The process according to any one of claims 18-21, characterized in that the modified metal oxides or metal aquoxides are dried by spray drying, freeze drying, microwave drying, drying in supercritical solvents, filtration, contact drying, or rotary drum drying.

~~28~~
31.

(New) The process according to any one of claims 18-21, characterized in that the modified metal oxides or metal aquoxides are dispersed in organic solvent as dispersions having a solids content of 10 to 35 wt%.

174

~~30~~
32.

(New) The process according to claim 31 wherein the solids content is from 20 to 30 weight percent.

~~34~~
33.

(New) The process according to any one of claims 18-21, characterized in that the metal oxides or metal aquoxides are taken up in an organic solvent and this solvent is exchanged for a second solvent.

32
33
34.

(New) The metal oxide or metal aquoxide dispersion comprising a metal oxide or metal aquoxide according to any one of claims 18-21, and a dispersant selected from the group consisting of

- an aprotic polar organic solvent,
- a protic, polar organic solvent having at least two carbon atoms,
- an apolar organic solvent and mixtures thereof.

32
33
34
35.

(New) The dispersion according to claim 34 wherein the dispersion contains an additive comprising at least one organic polymeric/oligomeric viscosity-adjusting agent.

178

34
35
36.

(New) The dispersion according to claim 35 wherein the viscosity-adjusting agent is selected from the group consisting of cellulose, a cellulose derivative, a polyacrylate, a polyvinyl alcohol and mixtures thereof.

35
36
37.


(New) The dispersion according to claim 36, characterized in that the dispersant is selected from the group consisting of a solvent-based paint, lacquer, a water-insoluble plastic, and mixtures thereof.

-7-

37
38.
C
A

(New) A process according to any one of claims 18-21, characterized in that the modified metal oxides or metal aquoxides are processed into molded articles by extrusion, pelleting, or spherical drop forming processes.

Respectfully submitted,


C. James Bushman
Reg. No. 24,810

Date: 1/13/02
Browning Bushman P.C.
5718 Westheimer, Suite 1800
Houston, TX 77057-5771
Tel.: (713) 266-5593
Fax: (713) 266-5169

CERTIFICATE OF EXPRESS MAILING

I, C. James Bushman, hereby certify that this correspondence and all referenced enclosures are being deposited by me with the United States Postal Service as Express Mail with Receipt No. EL715550119US in an envelope addressed to: Box PCT, Assistant Commissioner for Patents, Washington, DC 20231, on January 3, 2002.

By: 